



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,554	11/10/2003	Gerhard Mersch	60,130-1915;02MRA0419	5495

26096 7590 04/15/2005

CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

SMITH, TYRONE W

ART UNIT	PAPER NUMBER
----------	--------------

2837

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No. 10/705,554	Applicant(s) MERSCH, GERHARD	
	Examiner Tyrone W. Smith	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 6, 8 and 9 rejected under 35 U.S.C. 102(e) as being anticipated by Cregeur (6541929).

Regarding Claims 1 and 2. Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10).

Regarding Claim 6. Cregeur discloses approximately closed position corresponds to a position where at least one of the first and second windowpane contacts a corresponding seal with low force (using a position sensor Figure 1 item 62; column 3 lines 10-40).

Regarding Claims 8 and 9. Cregeur discloses a step of moving the first window pane to the fully closed position comprises pressing the first window pane against a seal until blocking of the window lifter motor occurs (column 3 lines 10-40).

3. Claims 11-12 and 15-18 rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda (JP10-102905).

Regarding Claim 11 and 12. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]. Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefore a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first window. (Figure 1, abstract, pages 4-9).

Regarding Claims 15 and 18. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control

device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]). The actuation and detection control device or blocking signal generator (Figure 1 item 18) used by Ikeda performs signal checking and generating.

Regarding Claim 16. Ikeda discloses the first and second controllers control the first and second window lifter motors, respectively, by pulse width modulation (pages 4-5 section [0025-0033]).

Regarding Claim 17. Ikeda show in Figure 1 that the first and second controllers are connected to a bus.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view of Ikeda (JP10-102905).

Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window

pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Cregeur does not disclose detecting whether the power window (first or second) has arrived at an end zone (threshold) before the power window is fully closed.

Regarding Claims 3 and 5, Ikeda discloses a power window device, which includes a device for suspending the closing movement of the window when detecting an object caught in the window (end zone before complete closure) and then learning and renewing the data for detection of an obstruction of the window. The data read in the position in which the area of obstruction occurred (end zone or threshold) (abstract).

It would have been obvious to one of ordinary skill at the time of invention to use Cregeur's apparatus and method for controlling vehicle power windows with Ikeda's a power window device. The advantage of combining the two would provide a system that can detect obstruction and retain data for detection future obstructions.

Regarding Claim 4, Cregeur discloses the claimed invention except showing the end zone covers approximately 4 mm before the fully closed position. It would have been obvious to one having ordinary skill in the art at the time the invention was made to program or adjust the end zone or threshold as related to the closure of the power window. In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art-recognized need for

adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious.).

It would have been obvious to one of ordinary skill at the time of invention to use Cregeur's apparatus and method for controlling vehicle power windows with Ikeda's a power window device. The advantage of combining the two would provide a system that can detect obstruction and retain data for detection future obstructions.

6. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view Ikeda (JP10-102905) and Itoh et al (4870333).

Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Creguer does not disclose checking whether a third window lifter is transmitting a blocking signal when the first windowpane reaches the approximately closed position.

Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first

and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]. Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefor a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first window. (Figure 1, abstract, pages 4-9. However, neither Creguer nor Ikeda discloses starting a counter corresponding to a waiting time if the checking step does not detect a blocking signal and moving the first window pane to the fully closed position and transmitting a blocking signal when the counter has reached a predetermined value corresponding to the waiting time.

Itoh discloses an automatic opening and closing device for a window, which includes starting a counter corresponding to a waiting time if the checking step does not detect a blocking signal (column 14 lines 10-16); moving the first window pane to the fully closed position and transmitting a blocking signal when the counter has reached a predetermined value corresponding to the waiting time (column 14 lines 17-26). Also refer to the abstract.

It would have been obvious to one of ordinary skill in the art at the time of invention to use Creguer's apparatus and method for controlling vehicle power windows, Ikeda's a power window device and Itoh's an automatic opening and closing device for a window. The advantage of combining the invention would provide a system, which can have fast response, possible to exhibit a desirable ventilative ability, and can prevent the accident of squeezing an object in the opening/closing device.

7. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Cregeur (6541929) in view of Kurihara et al (4536687).

Cregeur discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane (Figure 1 items 12-18) is approaching a fully closed position (using a position sensor Figure 1 item 62; column 3 lines 10-40) and using the control switches (Figure 1 items 52-58) for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows (column 2 lines 49-67, column 3 lines 1-10, 62-67 and column 4 lines 1-10). However, Cregeur does not disclose checking whether a third window lifter is transmitting a blocking signal when the first windowpane reaches the approximately closed position. However, Cregeur does not disclose checking whether the vehicle engine is running, wherein the steps of moving the first (or second) windowpane to an approximately closed position are executed only when the vehicle engine is running.

Kurihara discloses an apparatus for controlling power windows of a vehicle, which includes checking whether the vehicle engine is running (column 2 lines 16-38); moving the first (or second) windowpane to an approximately closed position are executed only when the vehicle engine is running (column 2 lines 16-38) Note that in Kurihara if the automatic closure unit is off, then the engine have to be turned on in order to close the power windows (column 4 lines 34-46).

It would have been obvious to one of ordinary skill in the art at the time of invention to use Cregeur's an apparatus and method for controlling vehicle power windows with Kurihara's an

apparatus for controlling power windows of a vehicle. The combination of the two would provide a system that can detect the window open or closed when the ignition switch is open with the option of automatically closing the window of the it is open if the engine is off.

8. Claims 13 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (JP10-102905) in view of Itoh et al (4870333).

Regarding Claims 13 and 14. Ikeda discloses a power window device, which includes a first and a second window lifter motor (Figure 1 item 8); a first and a second controller (Figure 1 item 10) that drive the first and second window lifter motors; a actuation and detection control device or blocking signal generator (Figure 1 item 18) that generates a blocking signal when at least one of the first and second sensor (Hall or Pulse sensors; Figure 1 item 24) indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal (pages 4-5 section [0025-0033]. Further, the first controller causes the first window lifter motor to move the first window pane to an approximately closed position if the checking circuit detects the blocking signal from the second controller and causes the first window lifter motor to move the first window pane to a fully closed position if the checking circuit does not detect the blocking signal from the second controller. The controllers are separate from each other therefor a first window, controlled by the first controller, can proceed to close whether or not a checking circuit or similar detect a blocking signal from the second controller; this does not impede the progress of the first window. (Figure 1, abstract, pages 4-9. However, Ikeda does not disclose a first and second controllers each further comprise a counter, wherein the counter in the first controller delays movement of the first window pane to the fully closed position by the first

window lifter motor until the counter has reached a predetermined value corresponding to a waiting time.

Itoh discloses an automatic opening and closing device for a window, which includes a counter (Figure 1 item 7) in the control system where the first controller delays movement of the first window pane to the fully closed position by the first window lifter motor until the counter has reached a predetermined value corresponding to a waiting time (column 14 lines 10-16 and column 14 lines 17-26). For each window there is a separate waiting time. Also refer to the abstract. Applicant is reminded the duplication of parts, in this case first and second controllers with counters, is common in an art where multiple open/closure systems are used in vehicles. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.).

Response to Arguments / Amendment

9. Applicant's arguments filed February 19, 2005 have been fully considered but they are not persuasive.

Applicant argues that the prior arts of record used to reject claims 1-18 does not disclose detecting the position (refer again to column 3 lines 10-40) of the window to a fully closed position, moving the first or second window pane to an approximately closed position if the

second or first window pane is approaching the fully closed position and using a blocking signal generator that generates a blocking signal when either the first and second sensor indicates that either the first or second window panes is approaching a fully closed position. Examiner respects and takes Applicants arguments in full consideration.

Examiner refers Applicant to M.P.E.P. Chapter 2100 section 2111[R1], During patent examination, the pending claims must be "given *>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). < Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969) (Claim 9 was directed to a process of analyzing data generated by mass spectrographic analysis of a gas. The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejections, the examiner explained that a mental process augmented by pencil and paper markings anticipated the claim. The court agreed that the claim was not limited to using a machine to carry out the process since the claim did not explicitly set forth the machine. The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject matter from the specification into the claim.). See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same

manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification."). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999) (The Board's construction of the claim limitation "restore hair growth" as requiring the hair to be returned to its original state was held to be an ** >incorrect< interpretation of the limitation. The court held that, consistent with applicant's disclosure and the disclosure of three patents from analogous arts using the same phrase to require only some increase in hair growth, one of ordinary skill would construe "restore hair growth" to mean that the claimed method increases the amount of hair grown on the scalp, but does not necessarily produce a full head of hair.). Examiner rejection is based on the claims as presented.

Regarding Claims 1, where the limitation states, Examiner paraphrases, moving the first or second windowpane to an approximately closed position if the second or first windowpane is approaching the fully closed position. Examiner interprets and gives moving or controlling the either windowpane their broadest interpretation. Cregeur [929] discloses an apparatus and method for controlling vehicle power windows which includes detecting or checking when the first or second window pane is approaching a fully closed position and using the control switches for moving the first window pane to an approximately closed position if the second window pane is approaching the fully closed position, moving the first window pane to the fully closed position if the second window pane is not approaching the fully closed position where the switches control the power windows. In Cregeur, the control switches are individually controlling

the power windows by way of a motor; if one window is not moving the other can be closed with a different switch. Examiner suggests that the Applicant amend the claims to expedite prosecution.

Regarding Claim 11, as interpreted by the Examiner, a blocking signal generator that generates a blocking signal when either the first and second sensor indicates that either the first or second windowpanes is approaching a fully closed position. Ikeda discloses a actuation and detection control device or blocking signal generator that generates a blocking signal when at least one of the first and second sensor indicates that at least one of the first and second window pane is approaching a fully closed position thereof, and checks whether one of said first and second controllers is transmitting a blocking signal. As interpreted by the Examiner, a power window approaches a closed position as, for example, a window closes if a hand or another object impedes its progress a blocking type signal would generate. Therefore, as the claims would indicate, a blocking signal would not generate if there were no impediment or blocking of the window. Examiner suggests that the Applicant amend the claims to expedite prosecution.

Regarding Claims 2-10 and 12-18, Examiner refers Applicant to Patent Rules C.F.R. 1.111 section b where it states, " In order to be entitled to reconsideration or further examination, the applicant or patent owner must reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims (each claim), including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further

consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a bona fide attempt to advance the application or the reexamination proceeding to final action. A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section.

Examiner requests that the Applicant amends the claims. Rejection is maintained based on 35 U.S.C. 102 and 103.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

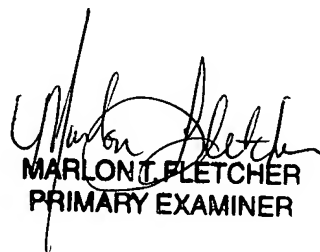
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

Art Unit 2837



MARLONT FLETCHER
PRIMARY EXAMINER